DICKSON

SC3

Temperature Chart Recorder Operation

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Rev. 09/06

Product Applications

The SC3 sets a new standard for compact recorders while providing the accuracy and resolution required for regulatory compliance and quality control. The reusable SC3 is rugged enough to withstand the rigors of transportation and storage applications. Best of all, its unbeatable low price makes temperature recording affordable for virtually any application.

Useful Features

- Rugged case ideal for transportation and storage applications
- F/C Switchable, 24 hour/7 day Switchable
- Easy user calibration
- Security slots for recorder security
- Special ranges for refrigerators, freezers, incubators and ambient conditions
- Optional tamper seals can be used to insure the integrity of the chart
- Compact (less than 4" tall/wide) and durable
- Operates for up to 2 years on a single "AA" battery
- Direct sensing, no remote probe, compact enough to be placed almost anywhere

Product Specifications

Temperature Sensor:	Precise spiral wound bi-metallic strip transducer
Recorder Accuracy:	±4˚F (±2.5˚C) over full scale
Ambient Operating Temperature:	-22 to +122˚F (-30 to +50˚C)
Response Time:	11 minutes to move 63% of full scale in air moving 5' per second
Temperature Ranges:	(˚F or ˚C depending on chart installed) -14 to +32˚F (-25 to 0˚C), +4 to +50˚F (-15 to +10˚C), +22 to +68˚F (-5 to +20˚C), +50 to +96˚F (+10 to +35˚C), +76 to +122˚F (+25 to +50˚C)
Recording Time:	24 hour or 7 day
Power Supply:	Single "AA" battery, up to 2 years average life
Resolution:	Not less than 1" per +55˚F in 1˚C or 2˚F steps
Mounting:	Free standing, wall mounted or suspended
Chart Size:	3" (75mm) DIA
Dimensions:	3.667" x 3.667" x 2.232" (93mm x 93mm x 57mm)
Weight:	0.5 lbs. (227 g)
Includes:	Battery, pen and instruction manual

Getting Started

- Place chart on recorder
- Set time by inserting a coin into chart hub and turning clockwise until the current hour is referenced to the time index clip. (Time index clip is directly to the right and below the pen tip).
- Remove protective pen cap. The chart movement is self-starting and runs continuously. Allow unit to stabilize in environment for 15 minutes.

Pen Replacement

Slide the used pen cartridge off and slide the new one on. Typical pen life is one year.

Battery Replacement

The battery compartment is located on the back of the recorder. The recorder uses a standard "AAA" battery for up to two years of battery life.

- Insert new battery with the positive end down

Chart Rotation Speed

The unit has a switchable clock, you can change the speed from a 7 day to a 24 hour rotation and from a 24 hour to a 7 day rotation. Make sure the right chart is selected for your rotation. Simply move the switch located on the back of the unit to the speed that fits your application.

Charts (for current pricing go to www.dicksonweb.com or call 1-800-323-2448)

°F and °C Switchable Range	7 Day °F Chart	7 Day °C Chart	24 Hour °F Chart	24 Hour °C Chart
-14 to +32°F / -20 to 0°C	C302	C310	C301	C309
+4 to +50°F / -15 to +20°C	C304	C312	C303	C311
+22 to +68°F / -5 to +20°C	C320	C318	C319	C317
+50 to +96°F / +10 to +35°C	C306	C341	C305	C313
+76 to +122°F / +25 to +50°C	C308	C316	C307	C315

Accessories (for current pricing go to www.dicksonweb.com or call 1-800-323-2448)

Description	Order #
NIST Traceable Calibration 3-pt. (new unit)	N300
A2LA Accredited Calibration 3-pt. (new unit)	N400
Pens (6 red)	P222
Locking Wall Mount Case	A715
Waterproof Pouch	A711

Calibration Services - New Units

N100 - NIST Traceable Calibration 1-Point: Includes documentation to one Dickson pre-selected point on new units only.

N300 - NIST Traceable Calibration 3-Point: Includes documentation of three Dickson pre-selected points (a high, medium, and low) on new units only.

N400 - Deluxe A2LA Accredited NIST Traceable Calibration 3-Point: ISO Guide 25/A2LA Documentation of 3 pre-selected points of as found data before and after calibration for Dickson temperature and/or humidity instrumentation on new units only.

N995 - NIST User Selected Temperature Points: Documentation of one customer specified point. Should be selected in addition to one of the above calibration options.

The Importance and Benefits of Regular Calibrations

Once you begin to use your precision Dickson instrumentation, regular calibrations are necessary to ensure accurate readings.

The following Calibration Services are available:

N150 - NIST Traceable Calibration 1-Point: Includes documentation to one Dickson pre-selected point after re-calibration.

N350 - NIST Traceable Calibration 3-Point: Includes documentation of three Dickson pre-selected points (a high, medium, and low) after re-calibration.

N450 - Deluxe A2LA Accredited NIST Traceable Calibration 3-Point: ISO Guide 25/A2LA Documentation of 3 pre-selected points of as found data before and after calibration for Dickson temperature and/or humidity instrumentation.

N995 - NIST User Selected Temperature Points: Documentation of one customer specified point. Should be selected in addition to one of the above calibration options.

Why should I recalibrate my instrumentation?
Over time dirt, dust and normal handling can throw your precision instrumentation out of calibration. Regular calibrations ensure that you receive the most accurate readings possible.

How often should I recalibrate my instrumentation?
Depending on the environment your instrument is used in and how often it is handled you will want to recalibrate your instrument every 6 to 12 months. Instruments in environments where there are extreme temperatures, wide temperature ranges, humidity or pressure variations, high condensation, dirt, dust and other debris will require calibration at least every 6 months. Instruments that are frequently moved or in locations with heavy machinery that cause vibrations should also be calibrated at least every 6 months.

Why should I return my instrument to Dickson for calibration?
Dickson calibrates your instrument at the factory using proprietary production/calibration software that guarantees proper calibration.

Our Capabilities
Dickson is the first manufacturer of humidity and temperature instrumentation to receive A2LA accreditation. We are also NIST Traceable; our procedures conform to MIS-STD-45662A, ANSI/NCSL 2540-1-1994, ISO/IEC Guide 25 and ISO10012. We are experts in the manufacture and calibration of humidity and temperature instruments.

Fast Service: Our turnaround time is 3 days or less so you receive not only expert service but fast service as well.

Easy: We make it easy for you! No phone calls for Return Authorization Numbers are required. We remind you when your instrument is due for calibration. You simply send in the completed Calibration Order Form with your unit for calibration with freight prepaid to Dickson.

Troubleshooting

Pen Tension
If the pen is not touching the paper, remove red pen and push the metal pen arm down near the middle of the arm. If that does not work unscrew the pen arm from the recorder and bend the pen arm down. Make sure the unit is in a stable environment, replace the pen arm at the same spot from where it was removed.

Chart Does Not Rotate
If the chart is not rotating make sure the center strip of the chart is inserted properly into the black center hub of the recorder making sure the chart is not torn or ripped. If the chart is properly installed and there is still no rotation the clock needs to be replaced, please call customer service for a return authorization number.

Warranty

Dickson warrants that the products it sells will be free from defects in material and workmanship under normal use and service for a period of twelve months after delivery. In the event of a claim under this warranty, the product or part must be returned to the factory for repair or replacement (shipping pre-paid) with a Return Authorization Number (see Return Information above). It will be repaired at Dickson's option without charge. This warranty DOES NOT cover routine calibration, pen, chart and battery replacement. The foregoing warranty and remedy are exclusive and in lieu of all other warranties either expressed or implied. Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products. Dickson makes no warranty for products not manufactured by it or for any products modified by buyer, or subject to misuse or neglect.

Factory Service & Returns

Contact the factory (630-543-3747) for a Return Authorization (RA) Number before returning any instrument. The model number, serial number and a purchase order number will be requested before an RA number is issued.

- Carefully repack the instrument, label the outside of the box with the RA# and return the instrument (freight pre-paid) to Dickson.
- All instruments that do not have the RA# clearly marked on the outside of the box will be refused. When returning instruments for credit, please include all accessories in shipment.
- Calibration/Freight charges are non-refundable.

NOTE: Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products.

Customer Satisfaction
Dickson takes pride in providing you, the customer, with the highest quality instrumentation. We welcome the opportunity to help you in any way possible. Whether it be a question or a new idea in documentation, the Dickson Company would like to hear your response. Please call our Customer Service Department at 1-800-323-2448 or (630) 543-3747 (in Illinois).

Software Return Policy
IMPORTANT-Read your Software License Agreement carefully before installing software. DIckson will accept returns for replacement of defective disks and CDs only.

DICKSON
930 South Westwood Avenue
Addison, Illinois 60101
Phone: (630) 543-3747 • E-mail: DicksonCSR@dicksonweb.com

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Fax to: 1-800-676-0498 Mail to: Dickson, 930 S. Westwood Ave, Addison, IL 60101

Step 1 - Bill To:

Name

Company

Address

City

State Zip

Phone ( ) –

Email

Step 2 - Ship To (if different than above)

Name

Company

Address

City

State Zip

Phone ( ) –

Email

Step 3 - Ordering Information

Order #	Quantity	Price/Unit		Total
		$	/each	$
		$	/each	$
		$	/each	$
		$	/each	$
			Subtotal:	$
	In Illinois, add 7.5% sales tax ▸		Tax:	$
			Freight:	$
	All Prices in U.S. Dollars ▸		**Total:**	$

Step 4 - Payment Method

☐ Check: Check # _____

☐ Money Order

☐ Credit Card: ☐ AMERICAN EXPRESS ☐ MasterCard ☐ VISA

Credit Card Number: ☐☐☐☐-☐☐☐☐-☐☐☐☐-☐☐☐☐ Expires: (mm/yy) ☐☐/☐☐

_____

Signature

☐ Purchase Order: P.O.# _____ (Net 15 days for established customers)

Customer #: _____

U.S.A. Freight Charges

Total Order	UPS 2nd Day	UPS Next Day	UPS Ground
$0-100	$19	$39	$12
$101-400	$24	$50	$18
$401-700	$33	$66	$21
$701-1,000	$43	$70	$30
$1,001-1,500	$64	$89	$45
$1,501-2,000	$84	$111	$53
$2,001-over Please call Dickson Customer Service			

All shipments UPS 2nd day unless otherwise requested.